ELSEVIER

Surface Science 363 (1996) 437–440

surface science

Author index

Abeln, G.C., see Avouris 363 (1996) 368
Aizawa, H. and S. Tsuneyuki, First-principles investigation of photo-induced desorption of CO and NO from Pt(111) 363 (1996) 223
Aizawa, T., see Souda 363 (1996) 133
Aizawa, T., see Souda 363 (1996) 139
Akpati, H.C., see Avouris 363 (1996) 368
Al-Shamery, K., see Beauport 363 (1996) 252
Arima, K., see Cho 363 (1996) 378
Avouris, Ph., R.E. Walkup, A.R. Rossi, H.C. Akpati, P. Nordlander, T.-C. Shen, G.C. Abeln and J.W. Lyding, Breaking individual chemical bonds via STM-induced excitations 363 (1996) 368

Babasaki, Y., see Yoneda 363 (1996) 11
Baddorf, A.P., see Okada 363 (1996) 416
Beauport, I., K. Al-Shamery and H.-J. Freund, Mechanism of the UV-laser-induced desorption of CO from Cr_2O_3(0001) 363 (1996) 252
Buatier de Mongeot, F., M. Rocca and U. Valbusa, Energy and angle dependence of the initial sticking coefficient of O_2 on Ag(001) 363 (1996) 68
Burns, A.R., E.B. Stechel and D.R. Jennison, Aspects of electronically stimulated processes of chemisorbed molecules 363 (1996) 303
Butler, D.A., see Kleyn 363 (1996) 29

Chakarov, D.V., see Hellsing 363 (1996) 247
Cho, K., Y. Ohfuti and K. Arima, Theory of resonant SNOM (scanning near-field optical microscopy): breakdown of the electric dipole selection rule in the reflection mode 363 (1996) 378
Czuba, P., see Szymonski 363 (1996) 229

Daimon, H., see Nakatsuji 363 (1996) 321
Diño, W.A., H. Kasai and A. Okiji, Combined effect of molecular rotational and surface vibrational excitations on the dissociative adsorption dynamics of D_2/Cu(111) 363 (1996) 52
Domen, K., S.S. Kano, T. Fujino, M. Furuki, M. Kashitani, J. Kubota, J.N. Kondo, A. Wada, M. Ishida, F. Goto, F. Wakabayashi and C. Hirose, Vibrational relaxation of hydroxyl groups in zeolite: the effect of adsorbed Xe 363 (1996) 397
Dowben, P.A., see Waldfried 363 (1996) 296

Franke, H., see Schlathölter 363 (1996) 79
Freund, H.-J., see Beauport 363 (1996) 252
Fujino, T., see Domen 363 (1996) 397
Fukutani, K., see Murata 363 (1996) 112
Fukutani, K., T.T. Magkoev, Y. Murata and K. Terakura, Adsorption and desorption of NO and CO on a Pt(111)–Ge surface alloy 363 (1996) 185
Fukutani, K., see Magkoev 363 (1996) 281
Furuki, M., see Domen 363 (1996) 397

Geuzebroek, F.H., see Yoneda 363 (1996) 11
Goto, F., see Domen 363 (1996) 397
Gross, A., Dynamical quantum processes of molecular beams at surfaces: dissociative adsorption of hydrogen on metal surfaces 363 (1996) 1
Gruzdkov, Yu.A., K. Watanabe and Y. Matsumoto, Photochemistry of methane on deuterium-covered Pt(111) surfaces 363 (1996) 195

Harder, R., see Snowdon 363 (1996) 42
Hasselbrink, E., M. Wolf, S. Holloway and P. Saalfrank, Classical and quantum-mechanical modeling of the stimulated desorption of ammonia from Cu(111) 363 (1996) 179
Hattori, K., see Komori 363 (1996) 268
Hayami, W., see Souda 363 (1996) 133
Hayami, W., see Souda 363 (1996) 139
Heiland, W., see Schlathölter 363 (1996) 79
Heinz, T.F., see Misewich 363 (1996) 204
Hellsing, B., D.V. Chakarov, L. Österlund, V.P. Zhdanov and B. Kasemo, Photoinduced desorption of potassium atoms from graphite 363 (1996) 247
Hirose, C., see Domen 363 (1996) 397
Ho, W., Femtosecond laser-induced dynamical quantum processes on solid surfaces (DQPSS) 363 (1996) 166
Holloway, S., see Lahaye 363 (1996) 91
Holloway, S., see Hasselbrink 363 (1996) 179

Iga, H., see Nishigaki 363 (1996) 121
Iimori, T., see Komori 363 (1996) 268
Ilisca, E. and S. Paris, A charge transfer process in *o–p* H_2 conversion induced by 3d impurities on a perovskite 363 (1996) 347

Ishida, H., On the lifetime of the parallel vibrational motion of adsorbates on metallic surfaces 363 (1996) 354
Ishida, M., see Domen 363 (1996) 397
Ishii, A. and K. Yamada , Theory of angle-resolved photoemission calculation with circular polarized light 363 (1996) 262
Ishizawa, Y., see Souda 363 (1996) 133
Ishizawa, Y., see Souda 363 (1996) 139
Ito, K., S. Ohyama, Y. Uehara and S. Ushioda, STM light emission spectra of individual nanostructures of porous Si 363 (1996) 423
Itoh, S., see Kishi 363 (1996) 100
Ivanov, G.K., M.A. Kozhushner and I.I. Oleinik, Tunneling dynamics of electrons and effective tunneling potential 363 (1996) 360

Jennison, D.R., see Burns 363 (1996) 303

Kaji, H., K. Kakitani, Y. Yagi and A. Yoshimori, Theoretical analysis of coverage-dependent rotational hindrance of PF_3 adsorbed on Ru(001) 363 (1996) 326
Kakitani, K., see Kaji 363 (1996) 326
Kakitani, K., see Yagi 363 (1996) 331
Kakuda, T., see Kasai 363 (1996) 428
Kano, S.S., see Domen 363 (1996) 397

Kasai, H., see Diño 363 (1996) 52
Kasai, H., A. Okiji and H. Tsuchiura, A microscopic theory of desorption induced by electronic transitions 363 (1996) 214
Kasai, H., see Tsuchiura 363 (1996) 274
Kasai, H., T. Kakuda and A. Okiji, Conductance quantization in an atom-sized contact between an STM-tip and a metal surface 363 (1996) 428
Kasemo, B., Charge transfer, electronic quantum processes, and dissociation dynamics in molecule–surface collisions 363 (1996) 22
Kasemo, B., see Hellsing 363 (1996) 247
Kashitani, M., see Domen 363 (1996) 397
Katayama, I., see Tanaka 363 (1996) 161
Kato, M., D.J. O'Connor, K. Yamamoto and R. Souda, Neutralization of a proton at adsorbate-covered metal surfaces 363 (1996) 150
Katrich, G.A., see Waldfried 363 (1996) 296
Kawai, H., A. Yoshimori and M. Nakayama, Valence fluctuation state of a metastable He atom beam on a metal surface, and singlet–triplet conversion 363 (1996) 127
Kawai, M., J. Yoshinobu and N. Takagi, Temporal and local reduction of adsorption potential energy under gas phase: CO on Ni(100) and Pt(111) 363 (1996) 85
Kawai, M., see Yoshinobu 363 (1996) 105
Kawai, M., see Yoshinobu 363 (1996) 234
Kawamoto, K., T. Mori, S. Kujime and K. Oura, Observation of the diffusion of Ag atoms through an a-Si layer on Si(111) by low-energy ion scattering 363 (1996) 156
Kim, J.-Y., see Park 363 (1996) 62
Kishi, T. and S. Itoh, Sulfur adsorption on an iron (001) surface by ab initio molecular dynamics 363 (1996) 100
Kleyn, A.W., D.A. Butler and A. Raukema, Dynamics of the interaction of O_2 with silver surfaces 363 (1996) 29
Kleyn, A.W., see Lahaye 363 (1996) 91
Koga, F., see Yoneda 363 (1996) 11
Kolodziej, J., see Szymonski 363 (1996) 229
Komori, F., K. Shudo, K. Hattori, T. Iimori and Y. Murata, STM study of laser-induced desorption from Si(111) surfaces with adsorbates 363 (1996) 268
Kondo, J.N., see Domen 363 (1996) 397
Korecki, P., see Szymonski 363 (1996) 229
Kozhushner, M.A., see Ivanov 363 (1996) 360
Kubota, J., see Domen 363 (1996) 397
Kujime, S., see Kawamoto 363 (1996) 156
Kunimori, K., see Uetsuka 363 (1996) 73
Kusakabe, K., see Miyake 363 (1996) 403

Lahaye, R.J.W.E., S. Stolte, S. Holloway and A.W. Kleyn, Out-of-plane scattering of Ar from Ag(111) 363 (1996) 91
Lee, J., see Park 363 (1996) 62
Lyding, J.W., see Avouris 363 (1996) 368

Magkoev, T.T., see Fukutani 363 (1996) 185
Magkoev, T.T., M.-B. Song, K. Fukutani and Y. Murata, Interaction of ultraviolet photons with NO/Ni(111) 363 (1996) 281
Makoshi, K., see Mii 363 (1996) 145
Mase, K., see Nagasono 363 (1996) 342
Matsuda, K., see Nakatsuji 363 (1996) 321
Matsumoto, Y., see Gruzdkov 363 (1996) 195
McIlroy, D.N., see Waldfried 363 (1996) 296
Mii, T. and K. Makoshi, An interpolation formula for electron transfer in atom–surface collision and its validity 363 (1996) 145
Misewich, J.A., S. Nakabayashi, P. Weigand, M. Wolf and T.F. Heinz, Anomalous branching ratio in the femtosecond surface chemistry of O_2/Pd(111) 363 (1996) 204
Miyake, T., K. Kusakabe and S. Tsuneyuki, Inverse isotope effects in the surface diffusion of atoms 363 (1996) 403
Mizutani, G., see Yamauchi 363 (1996) 385
Mori, T., see Kawamoto 363 (1996) 156
Morishita, H., see Tanaka 363 (1996) 161
Murata, Y., K. Fukutani and H. Nakatsuji, Repulsive interaction of CO^+ and a Pt surface derived from very low energy ion scattering 363 (1996) 112
Murata, Y., see Fukutani 363 (1996) 185
Murata, Y., see Komori 363 (1996) 268
Murata, Y., see Magkoev 363 (1996) 281

Nagasono, M., K. Mase and T. Urisu, Auger electron–ion coincidence study for H_2O adsorbed on SiO_2/Si(111) at 80 K 363 (1996) 342
Naitoh, M., see Nishigaki 363 (1996) 121
Nakabayashi, S., see Misewich 363 (1996) 204
Nakanishi, H., H. Ohnishi and A. Okiji, Inelastic scattering from the translational vibration mode of molecules adsorbed on solid surfaces 363 (1996) 391
Nakatsuji, H., see Murata 363 (1996) 112

Nakatsuji, K., K. Matsuda, T. Yonezawa, H. Daimon and S. Suga, Adsorption and desorption processes of Cl on a Si(100) surface 363 (1996) 321
Nakayama, H., T. Takeguchi and T. Nishino, Growth dynamics and an order–disorder transition in epitaxial alloy semiconductors 363 (1996) 409
Nakayama, M., see Kawai 363 (1996) 127
Namiki, A., see Yoneda 363 (1996) 11
Nesbitt, A., see Snowdon 363 (1996) 42
Nishigaki, S., K. Yamada, M. Naitoh and H. Iga, A metastable de-excitation spectroscopy study on the oxygenation of alkalated Ge(001) surfaces 363 (1996) 121
Nishino, T., see Nakayama 363 (1996) 409
Nordlander, P., see Avouris 363 (1996) 368

O'Connor, D.J., see Kato 363 (1996) 150
Ogasawara, H., see Yoshinobu 363 (1996) 234
Ogawa, S. and H. Petek, Two-photon photoemission spectroscopy at clean and oxidized Cu(110) and Cu(100) surfaces 363 (1996) 313
Ohfuti, Y., see Cho 363 (1996) 378
Ohnishi, H., see Nakanishi 363 (1996) 391
Ohyama, S., see Ito 363 (1996) 423
Okada, M., A.P. Baddorf, D.M. Zehner and E.W. Plummer, Effects of hydrogen on the dynamics of the $Mo_{0.95}Re_{0.05}$(110) surface 363 (1996) 416
Okiji, A., see Diño 363 (1996) 52
Okiji, A., see Kasai 363 (1996) 214
Okiji, A., see Tsuchiura 363 (1996) 274
Okiji, A., see Nakanishi 363 (1996) 391
Okiji, A., see Kasai 363 (1996) 428
Oleinik, I.I., see Ivanov 363 (1996) 360
Österlund, L., see Hellsing 363 (1996) 247
Otani, S., see Souda 363 (1996) 133
Oura, K., see Kawamoto 363 (1996) 156
Oura, K., see Tanaka 363 (1996) 161

Paris, S., see Ilisca 363 (1996) 347
Park, Y.-S., J.-Y. Kim and J. Lee, Abstraction of CH_3 group from the CH_3I molecule adsorbed on Cu(100) by gas-phase hydrogen atoms 363 (1996) 62
Paulsen-Boaz, C., see Rhodin 363 (1996) 240
Petek, H., see Ogawa 363 (1996) 313
Piacentini, M., see Szymonski 363 (1996) 229
Piatkowski, P., see Szymonski 363 (1996) 229
Plummer, E.W., see Ying 363 (1996) 289
Plummer, E.W., see Waldfried 363 (1996) 296
Plummer, E.W., see Okada 363 (1996) 416
Postawa, Z., see Szymonski 363 (1996) 229

Raukema, A., see Kleyn 363 (1996) 29
Rhodin, T.N. and C. Paulsen-Boaz, Energetics of photoexcited desorption from chlorinated Si(100) and Si(111) 363 (1996) 240
Rocca, M., see Buatier de Mongeot 363 (1996) 68
Rossi, A.R., see Avouris 363 (1996) 368
Ryu, J.T., see Tanaka 363 (1996) 161

Saalfrank, P., see Hasselbrink 363 (1996) 179
Sakai, J., see Yamauchi 363 (1996) 385
Sakamoto, K., see Yamauchi 363 (1996) 385
Sano, H., see Yamauchi 363 (1996) 385
Schlathölter, T., H. Franke, M. Vicanek and W. Heiland, The interaction of small molecules with Pd and K covered Pd surfaces at energies from 200 keV to 6 keV 363 (1996) 79
Shen, T.-C., see Avouris 363 (1996) 368
Shudo, K., see Komori 363 (1996) 268
Snowdon, K.J., R. Harder and A. Nesbitt, Dissociation dynamics of fast neutral molecules scattered under glancing incidence conditions from crystal surfaces 363 (1996) 42
Song, M.-B., see Magkoev 363 (1996) 281
Sonoda, Y., see Yamauchi 363 (1996) 385
Souda, R., W. Hayami, T. Aizawa, S. Otani and Y. Ishizawa, Auger-type electron emission from energetic He^+ ions interacting with the LaB_6(001) surface 363 (1996) 133
Souda, R., K. Yamamoto, W. Hayami, T. Aizawa and Y. Ishizawa, Low-energy He and Ne scattering from Al(111): reionization versus autoionization 363 (1996) 139
Souda, R., see Kato 363 (1996) 150
Stechel, E.B., see Burns 363 (1996) 303
Stolte, S., see Lahaye 363 (1996) 91
Suga, S., see Nakatsuji 363 (1996) 321
Szymonski, M., J. Kolodziej, P. Czuba, P. Korecki, P. Piatkowski, Z. Postawa, M. Piacentini and N. Zema, Photon stimulated desorption from alkali halide surfaces at near threshold energies 363 (1996) 229

Takagi, N., see Kawai 363 (1996) 85
Takeguchi, T., see Nakayama 363 (1996) 409
Tanaka, M., see Yoneda 363 (1996) 11
Tanaka, Y., H. Morishita, J.T. Ryu, I. Katayama and K. Oura, Thin-film growth-mode analysis by low energy ion scattering 363 (1996) 161
Terakura, K., see Fukutani 363 (1996) 185
Tsuchiura, H., see Kasai 363 (1996) 214
Tsuchiura, H., H. Kasai and A. Okiji, Effects of electronic excitations on potential energy surfaces: simple model calculations 363 (1996) 274
Tsuneyuki, S., see Aizawa 363 (1996) 223
Tsuneyuki, S., see Miyake 363 (1996) 403

Ueda, K., Electron-stimulated desorption study of an atomic hydrogen-adsorbed FZ-Si(100) surface 363 (1996) 337
Uehara, Y., see Ito 363 (1996) 423
Uetsuka, H., K. Watanabe and K. Kunimori, The dynamics of surface chemical reactions: infrared chemiluminescence of the product CO_2 desorbed from metal surfaces 363 (1996) 73
Urisu, T., see Nagasono 363 (1996) 342
Ushioda, S., see Yamauchi 363 (1996) 385
Ushioda, S., see Ito 363 (1996) 423

Valbusa, U., see Buatier de Mongeot 363 (1996) 68
Vicanek, M., see Schlathölter 363 (1996) 79

Wada, A., see Domen 363 (1996) 397
Wakabayashi, F., see Domen 363 (1996) 397
Waldfried, C., D.N. McIlroy, J. Zhang, P.A. Dowben, G.A. Katrich and E.W. Plummer, Determination of the surface Debye temperature of Mo(112) using valence band photoemission 363 (1996) 296
Walkup, R.E., see Avouris 363 (1996) 368
Wang, J., see Ying 363 (1996) 289
Watanabe, K., see Uetsuka 363 (1996) 73
Watanabe, K., see Gruzdkov 363 (1996) 195
Weigand, P., see Misewich 363 (1996) 204
Wolf, M., see Hasselbrink 363 (1996) 179
Wolf, M., see Misewich 363 (1996) 204

Yagi, Y., see Kaji 363 (1996) 326
Yagi, Y., K. Kakitani and A. Yoshimori, Excitation spectra of incommensurate Li chains on a Cu(100) surface 363 (1996) 331
Yamada, K., see Nishigaki 363 (1996) 121
Yamada, K., see Ishii 363 (1996) 262
Yamamoto, K., see Souda 363 (1996) 139
Yamamoto, K., see Kato 363 (1996) 150
Yamauchi, T., Y. Sonoda, K. Sakamoto, S. Ushioda, H. Sano, J. Sakai and G. Mizutani, Surface SHG and photoemission from Cs/p-GaAs and the Cs/O_2/p-GaAs coadsorbed system 363 (1996) 385
Yamazaki, N., see Yoneda 363 (1996) 11
Ying, Z.C., J. Wang and E.W. Plummer, Dynamics of the surface phase transformations in the K/Al(111) system 363 (1996) 289
Yoneda, S., Y. Babasaki, M. Tanaka, F.H. Geuzebroek, F. Koga, N. Yamazaki and A. Namiki, The poisonous effect of alkali adatoms on Cl_2 sticking 363 (1996) 11
Yonezawa, T., see Nakatsuji 363 (1996) 321
Yoshimori, A., see Kawai 363 (1996) 127
Yoshimori, A., see Kaji 363 (1996) 326
Yoshimori, A., see Yagi 363 (1996) 331
Yoshinobu, J., see Kawai 363 (1996) 85
Yoshinobu, J. and M. Kawai, Initial adsorption sites of CO on Pt(111) and Ni(100) at low temperature 363 (1996) 105
Yoshinobu, J., H. Ogasawara and M. Kawai, Broken symmetry of adsorbed methane and self-limiting photoinduced dissociation on Pt(111) 363 (1996) 234

Zehner, D.M., see Okada 363 (1996) 416
Zema, N., see Szymonski 363 (1996) 229
Zhang, J., see Waldfried 363 (1996) 296
Zhdanov, V.P., see Hellsing 363 (1996) 247

ELSEVIER

Surface Science 363 (1996) 441–449

surface science

Subject index

THEORETICAL METHODS, MODELS AND TECHNIQUES

Ab initio quantum chemical methods and calculations

T. Kishi and S. Itoh, Sulfur adsorption on an iron (001) surface by ab initio molecular dynamics 363 (1996) 100
H. Aizawa and S. Tsuneyuki, First-principles investigation of photo-induced desorption of CO and NO from Pt(111) 363 (1996) 223

Atom–solid interactions, scattering, diffraction

A. Gross, Dynamical quantum processes of molecular beams at surfaces: dissociative adsorption of hydrogen on metal surfaces 363 (1996) 1
W.A. Diño, H. Kasai and A. Okiji, Combined effect of molecular rotational and surface vibrational excitations on the dissociative adsorption dynamics of D_2/Cu(111) 363 (1996) 52
R.J.W.E. Lahaye, S. Stolte, S. Holloway and A.W. Kleyn, Out-of-plane scattering of Ar from Ag(111) 363 (1996) 91
H. Kawai, A. Yoshimori and M. Nakayama, Valence fluctuation state of a metastable He atom beam on a metal surface, and singlet–triplet conversion 363 (1996) 127

Atomistic dynamics

W.A. Diño, H. Kasai and A. Okiji, Combined effect of molecular rotational and surface vibrational excitations on the dissociative adsorption dynamics of D_2/Cu(111) 363 (1996) 52
M. Kato, D.J. O'Connor, K. Yamamoto and R. Souda, Neutralization of a proton at adsorbate-covered metal surfaces 363 (1996) 150

Computer simulations

A. Gross, Dynamical quantum processes of molecular beams at surfaces: dissociative adsorption of hydrogen on metal surfaces 363 (1996) 1
W.A. Diño, H. Kasai and A. Okiji, Combined effect of molecular rotational and surface vibrational excitations on the dissociative adsorption dynamics of D_2/Cu(111) 363 (1996) 52
R.J.W.E. Lahaye, S. Stolte, S. Holloway and A.W. Kleyn, Out-of-plane scattering of Ar from Ag(111) 363 (1996) 91
T. Kishi and S. Itoh, Sulfur adsorption on an iron (001) surface by ab initio molecular dynamics 363 (1996) 100
A. Ishii and K. Yamada, Theory of angle-resolved photoemission calculation with circular polarized light 363 (1996) 262
H. Kaji, K. Kakitani, Y. Yagi and A. Yoshimori, Theoretical analysis of coverage-dependent rotational hindrance of PF_3 adsorbed on Ru(001) 363 (1996) 326
T. Miyake, K. Kusakabe and S. Tsuneyuki, Inverse isotope effects in the surface diffusion of atoms 363 (1996) 403
H. Nakayama, T. Takeguchi and T. Nishino, Growth dynamics and an order–disorder transition in epitaxial alloy semiconductors 363 (1996) 409

Construction and use of effective interatomic interactions

R.J.W.E. Lahaye, S. Stolte, S. Holloway and A.W. Kleyn, Out-of-plane scattering of Ar from Ag(111) 363 (1996) 91

Density functional calculations

A. Gross, Dynamical quantum processes of molecular beams at surfaces: dissociative adsorption of hydrogen on metal surfaces 363 (1996) 1
T. Kishi and S. Itoh, Sulfur adsorption on an iron (001) surface by ab initio molecular dynamics 363 (1996) 100
A.R. Burns, E.B. Stechel and D.R. Jennison, Aspects of electronically stimulated processes of chemisorbed molecules 363 (1996) 303
Ph. Avouris, R.E. Walkup, A.R. Rossi, H.C. Akpati, P. Nordlander, T.-C. Shen, G.C. Abeln and J.W. Lyding, Breaking individual chemical bonds via STM-induced excitations 363 (1996) 368

Electron density, excitation spectra calculations

H. Tsuchiura, H. Kasai and A. Okiji, Effects of electronic excitations on potential energy surfaces: simple model calculations 363 (1996) 274
H. Ishida, On the lifetime of the parallel vibrational motion of adsorbates on metallic surfaces 363 (1996) 354

Electron–solid interactions, scattering, diffraction

B. Hellsing, D.V. Chakarov, L. Österlund, V.P. Zhdanov and B. Kasemo, Photoinduced desorption of potassium atoms from graphite 363 (1996) 247

Green's function methods

T. Mii and K. Makoshi, An interpolation formula for electron transfer in atom–surface collision and its validity 363 (1996) 145

G.K. Ivanov, M.A. Kozhushner and I.I. Oleinik, Tunneling dynamics of electrons and effective tunneling potential 363 (1996) 360

Ion–solid interactions, scattering, channeling

Y. Murata, K. Fukutani and H. Nakatsuji, Repulsive interaction of CO^+ and a Pt surface derived from very low energy ion scattering 363 (1996) 112

H. Kawai, A. Yoshimori and M. Nakayama, Valence fluctuation state of a metastable He atom beam on a metal surface, and singlet–triplet conversion 363 (1996) 127

M. Kato, D.J. O'Connor, K. Yamamoto and R. Souda, Neutralization of a proton at adsorbate-covered metal surfaces 363 (1996) 150

K. Kawamoto, T. Mori, S. Kujime and K. Oura, Observation of the diffusion of Ag atoms through an a-Si layer on Si(111) by low-energy ion scattering 363 (1996) 156

K. Nakatsuji, K. Matsuda, T. Yonezawa, H. Daimon and S. Suga, Adsorption and desorption processes of Cl on a Si(100) surface 363 (1996) 321

Ising models

H. Nakayama, T. Takeguchi and T. Nishino, Growth dynamics and an order–disorder transition in epitaxial alloy semiconductors 363 (1996) 409

Jellium models

H. Ishida, On the lifetime of the parallel vibrational motion of adsorbates on metallic surfaces 363 (1996) 354

Many body and quasi-particle theories

H. Kawai, A. Yoshimori and M. Nakayama, Valence fluctuation state of a metastable He atom beam on a metal surface, and singlet–triplet conversion 363 (1996) 127

S. Ogawa and H. Petek, Two-photon photoemission spectroscopy at clean and oxidized Cu(110) and Cu(100) surfaces 363 (1996) 313

G.K. Ivanov, M.A. Kozhushner and I.I. Oleinik, Tunneling dynamics of electrons and effective tunneling potential 363 (1996) 360

Models of surface chemical reactions

A. Gross, Dynamical quantum processes of molecular beams at surfaces: dissociative adsorption of hydrogen on metal surfaces 363 (1996) 1

W.A. Diño, H. Kasai and A. Okiji, Combined effect of molecular rotational and surface vibrational excitations on the dissociative adsorption dynamics of D_2/Cu(111) 363 (1996) 52

E. Ilisca and S. Paris, A charge transfer process in o–p H_2 conversion induced by 3d impurities on a perovskite 363 (1996) 347

Models of surface kinetics

W.A. Diño, H. Kasai and A. Okiji, Combined effect of molecular rotational and surface vibrational excitations on the dissociative adsorption dynamics of D_2/Cu(111) 363 (1996) 52

T. Miyake, K. Kusakabe and S. Tsuneyuki, Inverse isotope effects in the surface diffusion of atoms 363 (1996) 403

H. Nakayama, T. Takeguchi and T. Nishino, Growth dynamics and an order–disorder transition in epitaxial alloy semiconductors 363 (1996) 409

Molecular dynamics

W.A. Diño, H. Kasai and A. Okiji, Combined effect of molecular rotational and surface vibrational excitations on the dissociative adsorption dynamics of D_2/Cu(111) 363 (1996) 52

R.J.W.E. Lahaye, S. Stolte, S. Holloway and A.W. Kleyn, Out-of-plane scattering of Ar from Ag(111) 363 (1996) 91

T. Kishi and S. Itoh, Sulfur adsorption on an iron (001) surface by ab initio molecular dynamics 363 (1996) 100

E. Hasselbrink, M. Wolf, S. Holloway and P. Saalfrank, Classical and quantum-mechanical modeling of the stimulated desorption of ammonia from Cu(111) 363 (1996) 179

T.N. Rhodin and C. Paulsen-Boaz, Energetics of photoexcited desorption from chlorinated Si(100) and Si(111) 363 (1996) 240

A.R. Burns, E.B. Stechel and D.R. Jennison, Aspects of electronically stimulated processes of chemisorbed molecules 363 (1996) 303

Y. Yagi, K. Kakitani and A. Yoshimori, Excitation spectra of incommensurate Li chains on a Cu(100) surface 363 (1996) 331

K. Domen, S.S. Kano, T. Fujino, M. Furuki, M. Kashitani, J. Kubota, J.N. Kondo, A. Wada, M. Ishida, F. Goto, F. Wakabayashi and C. Hirose, Vibrational relaxation of hydroxyl groups in zeolite: the effect of adsorbed Xe 363 (1996) 397

Semi-empirical models and model calculations

W.A. Diño, H. Kasai and A. Okiji, Combined effect of molecular rotational and surface vibrational excitations on the dissociative adsorption dynamics of D_2/Cu(111) 363 (1996) 52

B. Hellsing, D.V. Chakarov, L. Österlund, V.P. Zhdanov and B. Kasemo, Photoinduced desorption of potassium atoms from graphite 363 (1996) 247

T. Miyake, K. Kusakabe and S. Tsuneyuki, Inverse isotope effects in the surface diffusion of atoms 363 (1996) 403

EXPERIMENTAL SAMPLE PREPARATION AND CHARACTERIZATION METHODS

Atom–solid reactions

H. Kawai, A. Yoshimori and M. Nakayama, Valence fluctuation state of a metastable He atom beam on a metal surface, and singlet–triplet conversion 363 (1996) 127

Atom–solid scattering and diffraction – inelastic

B. Kasemo, Charge transfer, electronic quantum processes, and dissociation dynamics in molecule–surface collisions 363 (1996) 22

A.W. Kleyn, D.A. Butler and A. Raukema, Dynamics of the interaction of O_2 with silver surfaces 363 (1996) 29

H. Nakanishi, H. Ohnishi and A. Okiji, Inelastic scattering from the translational vibration mode of molecules adsorbed on solid surfaces 363 (1996) 391

Auger electron spectroscopy

M. Nagasono, K. Mase and T. Urisu, Auger electron–ion coincidence study for H_2O adsorbed on SiO_2/Si(111) at 80 K 363 (1996) 342

Desorption induced by electronic transitions (DIET)

Angle resolved DIET (including electron stimulated desorption ion angular distribution (ESDIAD))

H. Kaji, K. Kakitani, Y. Yagi and A. Yoshimori, Theoretical analysis of coverage-dependent rotational hindrance of PF_3 adsorbed on Ru(001) 363 (1996) 326

Electron stimulated desorption (ESD)

A.R. Burns, E.B. Stechel and D.R. Jennison, Aspects of electronically stimulated processes of chemisorbed molecules 363 (1996) 303

K. Nakatsuji, K. Matsuda, T. Yonezawa, H. Daimon and S. Suga, Adsorption and desorption processes of Cl on a Si(100) surface 363 (1996) 321

K. Ueda, Electron-stimulated desorption study of an atomic hydrogen-adsorbed FZ-Si(100) surface 363 (1996) 337

M. Nagasono, K. Mase and T. Urisu, Auger electron–ion coincidence study for H_2O adsorbed on SiO_2/Si(111) at 80 K 363 (1996) 342

Ph. Avouris, R.E. Walkup, A.R. Rossi, H.C. Akpati, P. Nordlander, T.-C. Shen, G.C. Abeln and J.W. Lyding, Breaking individual chemical bonds via STM-induced excitations 363 (1996) 368

Photon stimulated desorption (PSD)

E. Hasselbrink, M. Wolf, S. Holloway and P. Saalfrank, Classical and quantum-mechanical modeling of the stimulated desorption of ammonia from Cu(111) 363 (1996) 179

K. Fukutani, T.T. Magkoev, Y. Murata and K. Terakura, Adsorption and desorption of NO and CO on a Pt(111)–Ge surface alloy 363 (1996) 185

J.A. Misewich, S. Nakabayashi, P. Weigand, M. Wolf and T.F. Heinz, Anomalous branching ratio in the femtosecond surface chemistry of O_2/Pd(111) 363 (1996) 204

H. Aizawa and S. Tsuneyuki, First-principles investigation of photo-induced desorption of CO and NO from Pt(111) 363 (1996) 223

M. Szymonski, J. Kolodziej, P. Czuba, P. Korecki, P. Piatkowski, Z. Postawa, M. Piacentini and N. Zema, Photon stimulated desorption from alkali halide surfaces at near threshold energies 363 (1996) 229

T.N. Rhodin and C. Paulsen-Boaz, Energetics of photoexcited desorption from chlorinated Si(100) and Si(111) 363 (1996) 240

B. Hellsing, D.V. Chakarov, L. Österlund, V.P. Zhdanov and B. Kasemo, Photoinduced desorption of potassium atoms from graphite 363 (1996) 247

I. Beauport, K. Al-Shamery and H.-J. Freund, Mechanism of the UV-laser-induced desorption of CO from Cr_2O_3(0001) 363 (1996) 252

F. Komori, K. Shudo, K. Hattori, T. Iimori and Y. Murata, STM study of laser-induced desorption from Si(111) surfaces with adsorbates 363 (1996) 268

Surface photochemistry

B. Kasemo, Charge transfer, electronic quantum processes, and dissociation dynamics in molecule–surface collisions 363 (1996) 22

K. Fukutani, T.T. Magkoev, Y. Murata and K. Terakura, Adsorption and desorption of NO and CO on a Pt(111)–Ge surface alloy 363 (1996) 185

Yu.A. Gruzdkov, K. Watanabe and Y. Matsumoto, Photochemistry of methane on deuterium-covered Pt(111) surfaces 363 (1996) 195

J.A. Misewich, S. Nakabayashi, P. Weigand, M. Wolf and T.F. Heinz, Anomalous branching ratio in the femtosecond surface chemistry of O_2/Pd(111) 363 (1996) 204

J. Yoshinobu, H. Ogasawara and M. Kawai, Broken symmetry of adsorbed methane and self-limiting photoinduced dissociation on Pt(111) 363 (1996) 234

T.N. Rhodin and C. Paulsen-Boaz, Energetics of photoexcited desorption from chlorinated Si(100) and Si(111) 363 (1996) 240

B. Hellsing, D.V. Chakarov, L. Österlund, V.P. Zhdanov and B. Kasemo, Photoinduced desorption of potassium atoms from graphite 363 (1996) 247

T.T. Magkoev, M.-B. Song, K. Fukutani and Y. Murata, Interaction of ultraviolet photons with NO/Ni(111) 363 (1996) 281

Electron emission measurements

S. Nishigaki, K. Yamada, M. Naitoh and H. Iga, A metastable de-excitation spectroscopy study on the oxygenation of alkalated Ge(001) surfaces 363 (1996) 121

Exoelectron emission

B. Kasemo, Charge transfer, electronic quantum processes, and dissociation dynamics in molecule–surface collisions 363 (1996) 22

Photoemission (total yield)

T. Yamauchi, Y. Sonoda, K. Sakamoto, S. Ushioda, H. Sano, J. Sakai and G. Mizutani, Surface SHG and photoemission from Cs/p-GaAs and the Cs/O_2/p-GaAs coadsorbed system 363 (1996) 385

Electron energy loss spectroscopy

F. Buatier de Mongeot, M. Rocca and U. Valbusa, Energy and angle dependence of the initial sticking coefficient of O_2 on Ag(001) 363 (1996) 68

Y. Yagi, K. Kakitani and A. Yoshimori, Excitation spectra of incommensurate Li chains on a Cu(100) surface 363 (1996) 331

M. Okada, A.P. Baddorf, D.M. Zehner and E.W. Plummer, Effects of hydrogen on the dynamics of the $Mo_{0.95}Re_{0.05}$(110) surface 363 (1996) 416

Electron–solid diffraction

Low energy electron diffraction (LEED)

C. Waldfried, D.N. McIlroy, J. Zhang, P.A. Dowben, G.A. Katrich and E.W. Plummer, Determination of the surface Debye temperature of Mo(112) using valence band photoemission 363 (1996) 296

M. Okada, A.P. Baddorf, D.M. Zehner and E.W. Plummer, Effects of hydrogen on the dynamics of the $Mo_{0.95}Re_{0.05}$(110) surface 363 (1996) 416

Inverse photoemission spectroscopy

K. Ito, S. Ohyama, Y. Uehara and S. Ushioda, STM light emission spectra of individual nanostructures of porous Si 363 (1996) 423

Ion scattering spectroscopy

Low energy ion scattering (LEIS)

K.J. Snowdon, R. Harder and A. Nesbitt, Dissociation dynamics of fast neutral molecules scattered under glancing incidence conditions from crystal surfaces 363 (1996) 42

T. Schlathölter, H. Franke, M. Vicanek and W. Heiland, The interaction of small molecules with Pd and K covered Pd surfaces at energies from 200 keV to 6 keV 363 (1996) 79

Y. Murata, K. Fukutani and H. Nakatsuji, Repulsive interaction of CO^+ and a Pt surface derived from very low energy ion scattering 363 (1996) 112

R. Souda, W. Hayami, T. Aizawa, S. Otani and Y. Ishizawa, Auger-type electron emission from energetic He^+ ions interacting with the LaB_6(001) surface 363 (1996) 133

R. Souda, K. Yamamoto, W. Hayami, T. Aizawa and Y. Ishizawa, Low-energy He and Ne scattering from Al(111): reionization versus autoionization 363 (1996) 139

K. Kawamoto, T. Mori, S. Kujime and K. Oura, Observation of the diffusion of Ag atoms through an a-Si layer on Si(111) by low-energy ion scattering 363 (1996) 156

Y. Tanaka, H. Morishita, J.T. Ryu, I. Katayama and K. Oura, Thin-film growth-mode analysis by low energy ion scattering 363 (1996) 161

Laser methods

J.A. Misewich, S. Nakabayashi, P. Weigand, M. Wolf and T.F. Heinz, Anomalous branching ratio in the femtosecond surface chemistry of O_2/Pd(111) 363 (1996) 204

S. Ogawa and H. Petek, Two-photon photoemission spectroscopy at clean and oxidized Cu(110) and Cu(100) surfaces 363 (1996) 313

K. Domen, S.S. Kano, T. Fujino, M. Furuki, M. Kashitani, J. Kubota, J.N. Kondo, A. Wada, M. Ishida, F. Goto, F. Wakabayashi and C. Hirose, Vibrational relaxation of hydroxyl groups in zeolite: the effect of adsorbed Xe 363 (1996) 397

Resonance enhanced multiphoton ionization mass spectroscopy (REMPI/MS)

K. Fukutani, T.T. Magkoev, Y. Murata and K. Terakura, Adsorption and desorption of NC and CO on a Pt(111)–Ge surface alloy 363 (1996) 185

A.R. Burns, E.B. Stechel and D.R. Jennison, Aspects of electronically stimulated processes of chemisorbed molecules 363 (1996) 303

Molecule–solid reactions

A. Gross, Dynamical quantum processes of molecular beams at surfaces: dissociative adsorption of hydrogen on metal surfaces 363 (1996) 1

W.A. Diño, H. Kasai and A. Okiji, Combined effect of molecular rotational and surface vibrational excitations on the dissociative adsorption dynamics of D_2/Cu(111) 363 (1996) 52

Molecule–solid scattering and diffraction – elastic

W.A. Diño, H. Kasai and A. Okiji, Combined effect of molecular rotational and surface vibrational excitations on the dissociative adsorption dynamics of D_2/Cu(111) 363 (1996) 52

Molecule–solid scattering and diffraction – inelastic

S. Yoneda, Y. Babasaki, M. Tanaka, F.H. Geuzebroek, F. Koga, N. Yamazaki and A. Namiki, The poisonous effect of alkali adatoms on Cl_2 sticking 363 (1996) 11

A.W. Kleyn, D.A. Butler and A. Raukema, Dynamics of the interaction of O_2 with silver surfaces 363 (1996) 29

W.A. Diño, H. Kasai and A. Okiji, Combined effect of molecular rotational and surface vibrational excitations on the dissociative adsorption dynamics of D_2/Cu(111) 363 (1996) 52

Non-linear optical methods

Z.C. Ying, J. Wang and E.W. Plummer, Dynamics of the surface phase transformations in the K/Al(111) system 363 (1996) 289

Second harmonic generation

Z.C. Ying, J. Wang and E.W. Plummer, Dynamics of the surface phase transformations in the K/Al(111) system 363 (1996) 289

T. Yamauchi, Y. Sonoda, K. Sakamoto, S. Ushioda, H. Sano, J. Sakai and G. Mizutani, Surface SHG and photoemission from Cs/p-GaAs and the Cs/O_2/p-GaAs coadsorbed system 363 (1996) 385

Photoelectron spectroscopy

Angle resolved photoemission

A. Ishii and K. Yamada, Theory of angle-resolved photoemission calculation with circular polarized light 363 (1996) 262
C. Waldfried, D.N. McIlroy, J. Zhang, P.A. Dowben, G.A. Katrich and E.W. Plummer, Determination of the surface Debye temperature of Mo(112) using valence band photoemission 363 (1996) 296
M. Okada, A.P. Baddorf, D.M. Zehner and E.W. Plummer, Effects of hydrogen on the dynamics of the $Mo_{0.95}Re_{0.05}$(110) surface 363 (1996) 416

Visible and ultraviolet photoelectron spectroscopy

S. Ogawa and H. Petek, Two-photon photoemission spectroscopy at clean and oxidized Cu(110) and Cu(100) surfaces 363 (1996) 313

X-ray photoelectron spectroscopy

Yu.A. Gruzdkov, K. Watanabe and Y. Matsumoto, Photochemistry of methane on deuterium-covered Pt(111) surfaces 363 (1996) 195

Photon absorption spectroscopy

Infrared absorption spectroscopy

M. Kawai, J. Yoshinobu and N. Takagi, Temporal and local reduction of adsorption potential energy under gas phase: CO on Ni(100) and Pt(111) 363 (1996) 85
J. Yoshinobu and M. Kawai, Initial adsorption sites of CO on Pt(111) and Ni(100) at low temperature 363 (1996) 105
J. Yoshinobu, H. Ogasawara and M. Kawai, Broken symmetry of adsorbed methane and self-limiting photoinduced dissociation on Pt(111) 363 (1996) 234
T.T. Magkoev, M.-B. Song, K. Fukutani and Y. Murata, Interaction of ultraviolet photons with NO/Ni(111) 363 (1996) 281

Photon stimulated desorption (non-electronic)

H. Aizawa and S. Tsuneyuki, First-principles investigation of photo-induced desorption of CO and NO from Pt(111) 363 (1996) 223
I. Beauport, K. Al-Shamery and H.-J. Freund, Mechanism of the UV-laser-induced desorption of CO from Cr_2O_3(0001) 363 (1996) 252

Reflection spectroscopy

T.T. Magkoev, M.-B. Song, K. Fukutani and Y. Murata, Interaction of ultraviolet photons with NO/Ni(111) 363 (1996) 281

Scanning tunneling microscopy

W. Ho, Femtosecond laser-induced dynamical quantum processes on solid surfaces (DQPSS) 363 (1996) 166
F. Komori, K. Shudo, K. Hattori, T. Iimori and Y. Murata, STM study of laser-induced desorption from Si(111) surfaces with adsorbates 363 (1996) 268
G.K. Ivanov, M.A. Kozhushner and I.I. Oleinik, Tunneling dynamics of electrons and effective tunneling potential 363 (1996) 360
Ph. Avouris, R.E. Walkup, A.R. Rossi, H.C. Akpati, P. Nordlander, T.-C. Shen, G.C. Abeln and J.W. Lyding, Breaking individual chemical bonds via STM-induced excitations 363 (1996) 368
K. Ito, S. Ohyama, Y. Uehara and S. Ushioda, STM light emission spectra of individual nanostructures of porous Si 363 (1996) 423
H. Kasai, T. Kakuda and A. Okiji, Conductance quantization in an atom-sized contact between an STM-tip and a metal surface 363 (1996) 428

Thermal desorption spectroscopy

Y.-S. Park, J.-Y. Kim and J. Lee, Abstraction of CH_3 group from the CH_3I molecule adsorbed on Cu(100) by gas-phase hydrogen atoms 363 (1996) 62
K. Fukutani, T.T. Magkoev, Y. Murata and K. Terakura, Adsorption and desorption of NO and CO on a Pt(111)–Ge surface alloy 363 (1996) 185
Yu.A. Gruzdkov, K. Watanabe and Y. Matsumoto, Photochemistry of methane on deuterium-covered Pt(111) surfaces 363 (1996) 195
J.A. Misewich, S. Nakabayashi, P. Weigand, M. Wolf and T.F. Heinz, Anomalous branching ratio in the femtosecond surface chemistry of O_2/Pd(111) 363 (1996) 204

Work function measurements

H. Kawai, A. Yoshimori and M. Nakayama, Valence fluctuation state of a metastable He atom beam on a metal surface, and singlet–triplet conversion 363 (1996) 127

X-ray scattering, diffraction, and reflection

C. Waldfried, D.N. McIlroy, J. Zhang, P.A. Dowben, G.A. Katrich and E.W. Plummer, Determination of the surface Debye temperature of Mo(112) using valence band photoemission 363 (1996) 296

PHENOMENA

Adsorption kinetics

W.A. Diño, H. Kasai and A. Okiji, Combined effect of molecular rotational and surface vibrational excitations on the dissociative adsorption dynamics of D_2/Cu(111) 363 (1996) 52
M. Kawai, J. Yoshinobu and N. Takagi, Temporal and local reduction of adsorption potential energy under gas phase: CO on Ni(100) and Pt(111) 363 (1996) 85
J. Yoshinobu and M. Kawai, Initial adsorption sites of CO on Pt(111) and Ni(100) at low temperature 363 (1996) 105
H. Nakayama, T. Takeguchi and T. Nishino, Growth dynamics and an order–disorder transition in epitaxial alloy semiconductors 363 (1996) 409

Atom emission

M. Szymonski, J. Kolodziej, P. Czuba, P. Korecki, P. Piatkowski, Z. Postawa, M. Piacentini and N. Zema, Photon stimulated desorption from alkali halide surfaces at near threshold energies 363 (1996) 229

Atom–solid interactions

B. Kasemo, Charge transfer, electronic quantum processes, and dissociation dynamics in molecule–surface collisions 363 (1996) 22

A.W. Kleyn, D.A. Butler and A. Raukema, Dynamics of the interaction of O_2 with silver surfaces 363 (1996) 29

Y.-S. Park, J.-Y. Kim and J. Lee, Abstraction of CH_3 group from the CH_3I molecule adsorbed on Cu(100) by gas-phase hydrogen atoms 363 (1996) 62

R.J.W.E. Lahaye, S. Stolte, S. Holloway and A.W. Kleyn, Out-of-plane scattering of Ar from Ag(111) 363 (1996) 91

R. Souda, K. Yamamoto, W. Hayami, T. Aizawa and Y. Ishizawa, Low-energy He and Ne scattering from Al(111): reionization versus autoionization 363 (1996) 139

Auger ejection

R. Souda, W. Hayami, T. Aizawa, S. Otani and Y. Ishizawa, Auger-type electron emission from energetic He^+ ions interacting with the LaB_6(001) surface 363 (1996) 133

M. Nagasono, K. Mase and T. Urisu, Auger electron–ion coincidence study for H_2O adsorbed on SiO_2/Si(111) at 80 K 363 (1996) 342

Catalysis

H. Uetsuka, K. Watanabe and K. Kunimori, The dynamics of surface chemical reactions: infrared chemiluminescence of the product CO_2 desorbed from metal surfaces 363 (1996) 73

Chemisorption

A. Gross, Dynamical quantum processes of molecular beams at surfaces: dissociative adsorption of hydrogen on metal surfaces 363 (1996) 1

A.W. Kleyn, D.A. Butler and A. Raukema, Dynamics of the interaction of O_2 with silver surfaces 363 (1996) 29

W.A. Diño, H. Kasai and A. Okiji, Combined effect of molecular rotational and surface vibrational excitations on the dissociative adsorption dynamics of D_2/Cu(111) 363 (1996) 52

T. Kishi and S. Itoh, Sulfur adsorption on an iron (001) surface by ab initio molecular dynamics 363 (1996) 100

S. Nishigaki, K. Yamada, M. Naitoh and H. Iga, A metastable de-excitation spectroscopy study on the oxygenation of alkalated Ge(001) surfaces 363 (1996) 121

H. Tsuchiura, H. Kasai and A. Okiji, Effects of electronic excitations on potential energy surfaces: simple model calculations 363 (1996) 274

H. Kaji, K. Kakitani, Y. Yagi and A. Yoshimori, Theoretical analysis of coverage-dependent rotational hindrance of PF_3 adsorbed on Ru(001) 363 (1996) 326

Diffusion and migration

M. Szymonski, J. Kolodziej, P. Czuba, P. Korecki, P. Piatkowski, Z. Postawa, M. Piacentini and N. Zema, Photon stimulated desorption from alkali halide surfaces at near threshold energies 363 (1996) 229

T. Miyake, K. Kusakabe and S. Tsuneyuki, Inverse isotope effects in the surface diffusion of atoms 363 (1996) 403

H. Nakayama, T. Takeguchi and T. Nishino, Growth dynamics and an order–disorder transition in epitaxial alloy semiconductors 363 (1996) 409

Electrical transport (conductivity, resistivity, mobility, etc.)

H. Kasai, T. Kakuda and A. Okiji, Conductance quantization in an atom-sized contact between an STM-tip and a metal surface 363 (1996) 428

Electron emission

R. Souda, W. Hayami, T. Aizawa, S. Otani and Y. Ishizawa, Auger-type electron emission from energetic He^+ ions interacting with the LaB_6(001) surface 363 (1996) 133

Electron–solid interactions

T. Mii and K. Makoshi, An interpolation formula for electron transfer in atom–surface collision and its validity 363 (1996) 145

Electron stimulated desorption

H. Kasai, A. Okiji and H. Tsuchiura, A microscopic theory of desorption induced by electronic transitions 363 (1996) 214

H. Tsuchiura, H. Kasai and A. Okiji, Effects of electronic excitations on potential energy surfaces: simple model calculations 363 (1996) 274

A.R. Burns, E.B. Stechel and D.R. Jennison, Aspects of electronically stimulated processes of chemisorbed molecules 363 (1996) 303

K. Nakatsuji, K. Matsuda, T. Yonezawa, H. Daimon and S. Suga, Adsorption and desorption processes of Cl on a Si(100) surface 363 (1996) 321

K. Ueda, Electron-stimulated desorption study of an atomic hydrogen-adsorbed FZ-Si(100) surface 363 (1996) 337

M. Nagasono, K. Mase and T. Urisu, Auger electron–ion coincidence study for H_2O adsorbed on SiO_2/Si(111) at 80 K 363 (1996) 342

Ph. Avouris, R.E. Walkup, A.R. Rossi, H.C. Akpati, P. Nordlander, T.-C. Shen, G.C. Abeln and J.W. Lyding, Breaking individual chemical bonds via STM-induced excitations 363 (1996) 368

Energy dissipation

K. Domen, S.S. Kano, T. Fujino, M. Furuki, M. Kashitani, J. Kubota, J.N. Kondo, A. Wada, M. Ishida, F. Goto, F. Wakabayashi and C. Hirose, Vibrational relaxation of hydroxyl groups in zeolite: the effect of adsorbed Xe 363 (1996) 397

Epitaxy

H. Nakayama, T. Takeguchi and T. Nishino, Growth dynamics and an order–disorder transition in epitaxial alloy semiconductors 363 (1996) 409

Field effect

Ph. Avouris, R.E. Walkup, A.R. Rossi, H.C. Akpati, P. Nordlander, T.-C. Shen, G.C. Abeln and J.W. Lyding, Breaking individual chemical bonds via STM-induced excitations 363 (1996) 368

Friction

H. Ishida, On the lifetime of the parallel vibrational motion of adsorbates on metallic surfaces 363 (1996) 354

Growth

Y. Tanaka, H. Morishita, J.T. Ryu, I. Katayama and K. Oura, Thin-film growth-mode analysis by low energy ion scattering 363 (1996) 161

Ion bombardment

R. Souda, W. Hayami, T. Aizawa, S. Otani and Y. Ishizawa, Auger-type electron emission from energetic He^+ ions interacting with the LaB_6(001) surface 363 (1996) 133

Ion–solid interactions

T. Schlathölter, H. Franke, M. Vicanek and W. Heiland, The interaction of small molecules with Pd and K covered Pd surfaces at energies from 200 keV to 6 keV 363 (1996) 79

Y. Murata, K. Fukutani and H. Nakatsuji, Repulsive interaction of CO^+ and a Pt surface derived from very low energy ion scattering 363 (1996) 112

R. Souda, K. Yamamoto, W. Hayami, T. Aizawa and Y. Ishizawa, Low-energy He and Ne scattering from Al(111): reionization versus autoionization 363 (1996) 139

M. Kato, D.J. O'Connor, K. Yamamoto and R. Souda, Neutralization of a proton at adsorbate-covered metal surfaces 363 (1996) 150

K. Nakatsuji, K. Matsuda, T. Yonezawa, H. Daimon and S. Suga, Adsorption and desorption processes of Cl on a Si(100) surface 363 (1996) 321

Luminescence

K. Ito, S. Ohyama, Y. Uehara and S. Ushioda, STM light emission spectra of individual nanostructures of porous Si 363 (1996) 423

Chemiluminescence

H. Uetsuka, K. Watanabe and K. Kunimori, The dynamics of surface chemical reactions: infrared chemiluminescence of the product CO_2 desorbed from metal surfaces 363 (1996) 73

Photoluminescence

H. Uetsuka, K. Watanabe and K. Kunimori, The dynamics of surface chemical reactions: infrared chemiluminescence of the product CO_2 desorbed from metal surfaces 363 (1996) 73

Magnetic phenomena (cyclotron resonance, phase transitions, etc.)

H. Kawai, A. Yoshimori and M. Nakayama, Valence fluctuation state of a metastable He atom beam on a metal surface, and singlet–triplet conversion 363 (1996) 127

Oxidation

H. Uetsuka, K. Watanabe and K. Kunimori, The dynamics of surface chemical reactions: infrared chemiluminescence of the product CO_2 desorbed from metal surfaces 363 (1996) 73

S. Nishigaki, K. Yamada, M. Naitoh and H. Iga, A metastable de-excitation spectroscopy study on the oxygenation of alkalated Ge(001) surfaces 363 (1996) 121

Photochemistry

K. Fukutani, T.T. Magkoev, Y. Murata and K. Terakura, Adsorption and desorption of NO and CO on a Pt(111)–Ge surface alloy 363 (1996) 185

Yu.A. Gruzdkov, K. Watanabe and Y. Matsumoto, Photochemistry of methane on deuterium-covered Pt(111) surfaces 363 (1996) 195

J.A. Misewich, S. Nakabayashi, P. Weigand, M. Wolf and T.F. Heinz, Anomalous branching ratio in the femtosecond surface chemistry of O_2/Pd(111) 363 (1996) 204

J. Yoshinobu, H. Ogasawara and M. Kawai, Broken symmetry of adsorbed methane and self-limiting photoinduced dissociation on Pt(111) 363 (1996) 234

B. Hellsing, D.V. Chakarov, L. Österlund, V.P. Zhdanov and B. Kasemo, Photoinduced desorption of potassium atoms from graphite 363 (1996) 247

T.T. Magkoev, M.-B. Song, K. Fukutani and Y. Murata, Interaction of ultraviolet photons with NO/Ni(111) 363 (1996) 281

Photon stimulated desorption

B. Kasemo, Charge transfer, electronic quantum processes, and dissociation dynamics in molecule–surface collisions 363 (1996) 22

K. Fukutani, T.T. Magkoev, Y. Murata and K. Terakura, Adsorption and desorption of NO and CO on a Pt(111)–Ge surface alloy 363 (1996) 185

Yu.A. Gruzdkov, K. Watanabe and Y. Matsumoto, Photochemistry of methane on deuterium-covered Pt(111) surfaces 363 (1996) 195

H. Kasai, A. Okiji and H. Tsuchiura, A microscopic theory of desorption induced by electronic transitions 363 (1996) 214

H. Aizawa and S. Tsuneyuki, First-principles investigation of photo-induced desorption of CO and NO from Pt(111) 363 (1996) 223

M. Szymonski, J. Kolodziej, P. Czuba, P. Korecki, P. Piatkowski, Z. Postawa, M. Piacentini and N. Zema, Photon stimulated desorption from alkali halide surfaces at near threshold energies 363 (1996) 229
I. Beauport, K. Al-Shamery and H.-J. Freund, Mechanism of the UV-laser-induced desorption of CO from Cr_2O_3(0001) 363 (1996) 252
H. Tsuchiura, H. Kasai and A. Okiji, Effects of electronic excitations on potential energy surfaces: simple model calculations 363 (1996) 274
A.R. Burns, E.B. Stechel and D.R. Jennison, Aspects of electronically stimulated processes of chemisorbed molecules 363 (1996) 303

Physical adsorption

W.A. Diño, H. Kasai and A. Okiji, Combined effect of molecular rotational and surface vibrational excitations on the dissociative adsorption dynamics of D_2/Cu(111) 363 (1996) 52
J. Yoshinobu, H. Ogasawara and M. Kawai, Broken symmetry of adsorbed methane and self-limiting photoinduced dissociation on Pt(111) 363 (1996) 234

Quantum effects

A. Gross, Dynamical quantum processes of molecular beams at surfaces: dissociative adsorption of hydrogen on metal surfaces 363 (1996) 1
W.A. Diño, H. Kasai and A. Okiji, Combined effect of molecular rotational and surface vibrational excitations on the dissociative adsorption dynamics of D_2/Cu(111) 363 (1996) 52
T. Miyake, K. Kusakabe and S. Tsuneyuki, Inverse isotope effects in the surface diffusion of atoms 363 (1996) 403

Second harmonic generation

Z.C. Ying, J. Wang and E.W. Plummer, Dynamics of the surface phase transformations in the K/Al(111) system 363 (1996) 289

Sticking

A. Gross, Dynamical quantum processes of molecular beams at surfaces: dissociative adsorption of hydrogen on metal surfaces 363 (1996) 1
S. Yoneda, Y. Babasaki, M. Tanaka, F.H. Geuzebroek, F. Koga, N. Yamazaki and A. Namiki, The poisonous effect of alkali adatoms on Cl_2 sticking 363 (1996) 11
W.A. Diño, H. Kasai and A. Okiji, Combined effect of molecular rotational and surface vibrational excitations on the dissociative adsorption dynamics of D_2/Cu(111) 363 (1996) 52
F. Buatier de Mongeot, M. Rocca and U. Valbusa, Energy and angle dependence of the initial sticking coefficient of O_2 on Ag(001) 363 (1996) 68

Surface chemical reaction

A. Gross, Dynamical quantum processes of molecular beams at surfaces: dissociative adsorption of hydrogen on metal surfaces 363 (1996) 1
S. Yoneda, Y. Babasaki, M. Tanaka, F.H. Geuzebroek, F. Koga, N. Yamazaki and A. Namiki, The poisonous effect of alkali adatoms on Cl_2 sticking 363 (1996) 11
W.A. Diño, H. Kasai and A. Okiji, Combined effect of molecular rotational and surface vibrational excitations on the dissociative adsorption dynamics of D_2/Cu(111) 363 (1996) 52
Y.-S. Park, J.-Y. Kim and J. Lee, Abstraction of CH_3 group from the CH_3I molecule adsorbed on Cu(100) by gas-phase hydrogen atoms 363 (1996) 62
H. Uetsuka, K. Watanabe and K. Kunimori, The dynamics of surface chemical reactions: infrared chemiluminescence of the product CO_2 desorbed from metal surfaces 363 (1996) 73
M. Kawai, J. Yoshinobu and N. Takagi, Temporal and local reduction of adsorption potential energy under gas phase: CO on Ni(100) and Pt(111) 363 (1996) 85
Yu.A. Gruzdkov, K. Watanabe and Y. Matsumoto, Photochemistry of methane on deuterium-covered Pt(111) surfaces 363 (1996) 195
J. Yoshinobu, H. Ogasawara and M. Kawai, Broken symmetry of adsorbed methane and self-limiting photoinduced dissociation on Pt(111) 363 (1996) 234

Surface diffusion

T. Miyake, K. Kusakabe and S. Tsuneyuki, Inverse isotope effects in the surface diffusion of atoms 363 (1996) 403

Surface electrical transport (surface conductivity, surface recombination, etc.)

H. Ishida, On the lifetime of the parallel vibrational motion of adsorbates on metallic surfaces 363 (1996) 354

Surface electronic phenomena (work function, surface potential, surface states, etc.)

S. Nishigaki, K. Yamada, M. Naitoh and H. Iga, A metastable de-excitation spectroscopy study on the oxygenation of alkalated Ge(001) surfaces 363 (1996) 121
H. Kawai, A. Yoshimori and M. Nakayama, Valence fluctuation state of a metastable He atom beam on a metal surface, and singlet–triplet conversion 363 (1996) 127
G.K. Ivanov, M.A. Kozhushner and I.I. Oleinik, Tunneling dynamics of electrons and effective tunneling potential 363 (1996) 360
T. Yamauchi, Y. Sonoda, K. Sakamoto, S. Ushioda, H. Sano, J. Sakai and G. Mizutani, Surface SHG and photoemission from Cs/p-GaAs and the Cs/O_2/p-GaAs coadsorbed system 363 (1996) 385

Surface relaxation and reconstruction

T. Kishi and S. Itoh, Sulfur adsorption on an iron (001) surface by ab initio molecular dynamics 363 (1996) 100
Y. Yagi, K. Kakitani and A. Yoshimori, Excitation spectra of incommensurate Li chains on a Cu(100) surface 363 (1996) 331

K. Domen, S.S. Kano, T. Fujino, M. Furuki, M. Kashitani, J. Kubota, J.N. Kondo, A. Wada, M. Ishida, F. Goto, F. Wakabayashi and C. Hirose, Vibrational relaxation of hydroxyl groups in zeolite: the effect of adsorbed Xe 363 (1996) 397

Surface structure, morphology, roughness, and topography

K. Kawamoto, T. Mori, S. Kujime and K. Oura, Observation of the diffusion of Ag atoms through an a-Si layer on Si(111) by low-energy ion scattering 363 (1996) 156

Z.C. Ying, J. Wang and E.W. Plummer, Dynamics of the surface phase transformations in the K/Al(111) system 363 (1996) 289

K. Ito, S. Ohyama, Y. Uehara and S. Ushioda, STM light emission spectra of individual nanostructures of porous Si 363 (1996) 423

Thermal desorption

A. Gross, Dynamical quantum processes of molecular beams at surfaces: dissociative adsorption of hydrogen on metal surfaces 363 (1996) 1

Y.-S. Park, J.-Y. Kim and J. Lee, Abstraction of CH_3 group from the CH_3I molecule adsorbed on Cu(100) by gas-phase hydrogen atoms 363 (1996) 62

Tunneling

W.A. Diño, H. Kasai and A. Okiji, Combined effect of molecular rotational and surface vibrational excitations on the dissociative adsorption dynamics of D_2/Cu(111) 363 (1996) 52

G.K. Ivanov, M.A. Kozhushner and I.I. Oleinik, Tunneling dynamics of electrons and effective tunneling potential 363 (1996) 360

Ph. Avouris, R.E. Walkup, A.R. Rossi, H.C. Akpati, P. Nordlander, T.-C. Shen, G.C. Abeln and J.W. Lyding, Breaking individual chemical bonds via STM-induced excitations 363 (1996) 368

T. Miyake, K. Kusakabe and S. Tsuneyuki, Inverse isotope effects in the surface diffusion of atoms 363 (1996) 403

Vibrations of adsorbed molecules

M. Kawai, J. Yoshinobu and N. Takagi, Temporal and local reduction of adsorption potential energy under gas phase: CO on Ni(100) and Pt(111) 363 (1996) 85

K. Fukutani, T.T. Magkoev, Y. Murata and K. Terakura, Adsorption and desorption of NO and CO on a Pt(111)–Ge surface alloy 363 (1996) 185

J. Yoshinobu, H. Ogasawara and M. Kawai, Broken symmetry of adsorbed methane and self-limiting photoinduced dissociation on Pt(111) 363 (1996) 234

Y. Yagi, K. Kakitani and A. Yoshimori, Excitation spectra of incommensurate Li chains on a Cu(100) surface 363 (1996) 331

H. Ishida, On the lifetime of the parallel vibrational motion of adsorbates on metallic surfaces 363 (1996) 354

H. Nakanishi, H. Ohnishi and A. Okiji, Inelastic scattering from the translational vibration mode of molecules adsorbed on solid surfaces 363 (1996) 391

K. Domen, S.S. Kano, T. Fujino, M. Furuki, M. Kashitani, J. Kubota, J.N. Kondo, A. Wada, M. Ishida, F. Goto, F. Wakabayashi and C. Hirose, Vibrational relaxation of hydroxyl groups in zeolite: the effect of adsorbed Xe 363 (1996) 397

ELSEVIER

Surface Science 363 (1996) 451–456

surface science

Materials index

ELEMENTAL AND CHEMICAL IDENTITY

Elements

Alkali metals

S. Yoneda, Y. Babasaki, M. Tanaka, F.H. Geuzebroek, F. Koga, N. Yamazaki and A. Namiki, The poisonous effect of alkali adatoms on Cl_2 sticking 363 (1996) 11

B. Kasemo, Charge transfer, electronic quantum processes, and dissociation dynamics in molecule–surface collisions 363 (1996) 22

S. Nishigaki, K. Yamada, M. Naitoh and H. Iga, A metastable de-excitation spectroscopy study on the oxygenation of alkalated Ge(001) surfaces 363 (1996) 121

Z.C. Ying, J. Wang and E.W. Plummer, Dynamics of the surface phase transformations in the K/Al(111) system 363 (1996) 289

Y. Yagi, K. Kakitani and A. Yoshimori, Excitation spectra of incommensurate Li chains on a Cu(100) surface 363 (1996) 331

T. Yamauchi, Y. Sonoda, K. Sakamoto, S. Ushioda, H. Sano, J. Sakai and G. Mizutani, Surface SHG and photoemission from Cs/p-GaAs and the Cs/O_2/p-GaAs coadsorbed system 363 (1996) 385

Aluminum

R. Souda, K. Yamamoto, W. Hayami, T. Aizawa and Y. Ishizawa, Low-energy He and Ne scattering from Al(111): reionization versus autoionization 363 (1996) 139

M. Kato, D.J. O'Connor, K. Yamamoto and R. Souda, Neutralization of a proton at adsorbate-covered metal surfaces 363 (1996) 150

A. Ishii and K. Yamada, Theory of angle-resolved photoemission calculation with circular polarized light 363 (1996) 262

Z.C. Ying, J. Wang and E.W. Plummer, Dynamics of the surface phase transformations in the K/Al(111) system 363 (1996) 289

Chlorine

K. Nakatsuji, K. Matsuda, T. Yonezawa, H. Daimon and S. Suga, Adsorption and desorption processes of Cl on a Si(100) surface 363 (1996) 321

Copper

A. Gross, Dynamical quantum processes of molecular beams at surfaces: dissociative adsorption of hydrogen on metal surfaces 363 (1996) 1

K.J. Snowdon, R. Harder and A. Nesbitt, Dissociation dynamics of fast neutral molecules scattered under glancing incidence conditions from crystal surfaces 363 (1996) 42

W.A. Diño, H. Kasai and A. Okiji, Combined effect of molecular rotational and surface vibrational excitations on the dissociative adsorption dynamics of D_2/Cu(111) 363 (1996) 52

Y.-S. Park, J.-Y. Kim and J. Lee, Abstraction of CH_3 group from the CH_3I molecule adsorbed on Cu(100) by gas-phase hydrogen atoms 363 (1996) 62

E. Hasselbrink, M. Wolf, S. Holloway and P. Saalfrank, Classical and quantum-mechanical modeling of the stimulated desorption of ammonia from Cu(111) 363 (1996) 179

S. Ogawa and H. Petek, Two-photon photoemission spectroscopy at clean and oxidized Cu(110) and Cu(100) surfaces 363 (1996) 313

Y. Yagi, K. Kakitani and A. Yoshimori, Excitation spectra of incommensurate Li chains on a Cu(100) surface 363 (1996) 331

Germanium

S. Nishigaki, K. Yamada, M. Naitoh and H. Iga, A metastable de-excitation spectroscopy study on the oxygenation of alkalated Ge(001) surfaces 363 (1996) 121

K. Fukutani, T.T. Magkoev, Y. Murata and K. Terakura, Adsorption and desorption of NO and CO on a Pt(111)–Ge surface alloy 363 (1996) 185

Graphite

B. Kasemo, Charge transfer, electronic quantum processes, and dissociation dynamics in molecule–surface collisions 363 (1996) 22

B. Hellsing, D.V. Chakarov, L. Österlund, V.P. Zhdanov and B. Kasemo, Photoinduced desorption of potassium atoms from graphite 363 (1996) 247

Hydrogen

A. Gross, Dynamical quantum processes of molecular beams at surfaces: dissociative adsorption of hydrogen on metal surfaces 363 (1996) 1

W.A. Diño, H. Kasai and A. Okiji, Combined effect of molecular rotational and surface vibrational excitations on the dissociative adsorption dynamics of D_2/Cu(111) 363 (1996) 52
E. Ilisca and S. Paris, A charge transfer process in o–p H_2 conversion induced by 3d impurities on a perovskite 363 (1996) 347
T. Miyake, K. Kusakabe and S. Tsuneyuki, Inverse isotope effects in the surface diffusion of atoms 363 (1996) 403

Iron

T. Kishi and S. Itoh, Sulfur adsorption on an iron (001) surface by ab initio molecular dynamics 363 (1996) 100

Lead

Y. Tanaka, H. Morishita, J.T. Ryu, I. Katayama and K. Oura, Thin-film growth-mode analysis by low energy ion scattering 363 (1996) 161

Molybdenum

M. Okada, A.P. Baddorf, D.M. Zehner and E.W. Plummer, Effects of hydrogen on the dynamics of the $Mo_{0.95}Re_{0.05}$(110) surface 363 (1996) 416

Nickel

H. Uetsuka, K. Watanabe and K. Kunimori, The dynamics of surface chemical reactions: infrared chemiluminescence of the product CO_2 desorbed from metal surfaces 363 (1996) 73
M. Kawai, J. Yoshinobu and N. Takagi, Temporal and local reduction of adsorption potential energy under gas phase: CO on Ni(100) and Pt(111) 363 (1996) 85
J. Yoshinobu and M. Kawai, Initial adsorption sites of CO on Pt(111) and Ni(100) at low temperature 363 (1996) 105
T.T. Magkoev, M.-B. Song, K. Fukutani and Y. Murata, Interaction of ultraviolet photons with NO/Ni(111) 363 (1996) 281

Noble gases

R. Souda, W. Hayami, T. Aizawa, S. Otani and Y. Ishizawa, Auger-type electron emission from energetic He^+ ions interacting with the LaB_6(001) surface 363 (1996) 133
R. Souda, K. Yamamoto, W. Hayami, T. Aizawa and Y. Ishizawa, Low-energy He and Ne scattering from Al(111): reionization versus autoionization 363 (1996) 139
H. Nakanishi, H. Ohnishi and A. Okiji, Inelastic scattering from the translational vibration mode of molecules adsorbed on solid surfaces 363 (1996) 391
K. Domen, S.S. Kano, T. Fujino, M. Furuki, M. Kashitani, J. Kubota, J.N. Kondo, A. Wada, M. Ishida, F. Goto, F. Wakabayashi and C. Hirose, Vibrational relaxation of hydroxyl groups in zeolite: the effect of adsorbed Xe 363 (1996) 397

Palladium

A. Gross, Dynamical quantum processes of molecular beams at surfaces: dissociative adsorption of hydrogen on metal surfaces 363 (1996) 1
H. Uetsuka, K. Watanabe and K. Kunimori, The dynamics of surface chemical reactions: infrared chemiluminescence of the product CO_2 desorbed from metal surfaces 363 (1996) 73
T. Schlathölter, H. Franke, M. Vicanek and W. Heiland, The interaction of small molecules with Pd and K covered Pd surfaces at energies from 200 keV to 6 keV 363 (1996) 79
J.A. Misewich, S. Nakabayashi, P. Weigand, M. Wolf and T.F. Heinz, Anomalous branching ratio in the femtosecond surface chemistry of O_2/Pd(111) 363 (1996) 204

Platinum

K.J. Snowdon, R. Harder and A. Nesbitt, Dissociation dynamics of fast neutral molecules scattered under glancing incidence conditions from crystal surfaces 363 (1996) 42
H. Uetsuka, K. Watanabe and K. Kunimori, The dynamics of surface chemical reactions: infrared chemiluminescence of the product CO_2 desorbed from metal surfaces 363 (1996) 73
M. Kawai, J. Yoshinobu and N. Takagi, Temporal and local reduction of adsorption potential energy under gas phase: CO on Ni(100) and Pt(111) 363 (1996) 85
J. Yoshinobu and M. Kawai, Initial adsorption sites of CO on Pt(111) and Ni(100) at low temperature 363 (1996) 105
Y. Murata, K. Fukutani and H. Nakatsuji, Repulsive interaction of CO^+ and a Pt surface derived from very low energy ion scattering 363 (1996) 112
K. Fukutani, T.T. Magkoev, Y. Murata and K. Terakura, Adsorption and desorption of NO and CO on a Pt(111)–Ge surface alloy 363 (1996) 185
Yu.A. Gruzdkov, K. Watanabe and Y. Matsumoto, Photochemistry of methane on deuterium-covered Pt(111) surfaces 363 (1996) 195
H. Aizawa and S. Tsuneyuki, First-principles investigation of photo-induced desorption of CO and NO from Pt(111) 363 (1996) 223
J. Yoshinobu, H. Ogasawara and M. Kawai, Broken symmetry of adsorbed methane and self-limiting photoinduced dissociation on Pt(111) 363 (1996) 234

Rhenium

M. Okada, A.P. Baddorf, D.M. Zehner and E.W. Plummer, Effects of hydrogen on the dynamics of the $Mo_{0.95}Re_{0.05}$(110) surface 363 (1996) 416

Ruthenium

H. Kaji, K. Kakitani, Y. Yagi and A. Yoshimori, Theoretical analysis of coverage-dependent rotational hindrance of PF_3 adsorbed on Ru(001) 363 (1996) 326

Silicon

S. Yoneda, Y. Babasaki, M. Tanaka, F.H. Geuzebroek, F. Koga, N. Yamazaki and A. Namiki, The poisonous effect of alkali adatoms on Cl_2 sticking 363 (1996) 11
K. Kawamoto, T. Mori, S. Kujime and K. Oura, Observation of the diffusion of Ag atoms through an a-Si layer on Si(111) by low-energy ion scattering 363 (1996) 156

Y. Tanaka, H. Morishita, J.T. Ryu, I. Katayama and K. Oura, Thin-film growth-mode analysis by low energy ion scattering 363 (1996) 161
F. Komori, K. Shudo, K. Hattori, T. Iimori and Y. Murata, STM study of laser-induced desorption from Si(111) surfaces with adsorbates 363 (1996) 268
K. Nakatsuji, K. Matsuda, T. Yonezawa, H. Daimon and S. Suga, Adsorption and desorption processes of Cl on a Si(100) surface 363 (1996) 321
K. Ueda, Electron-stimulated desorption study of an atomic hydrogen-adsorbed FZ-Si(100) surface 363 (1996) 337
Ph. Avouris, R.E. Walkup, A.R. Rossi, H.C. Akpati, P. Nordlander, T.-C. Shen, G.C. Abeln and J.W. Lyding, Breaking individual chemical bonds via STM-induced excitations 363 (1996) 368
K. Ito, S. Ohyama, Y. Uehara and S. Ushioda, STM light emission spectra of individual nanostructures of porous Si 363 (1996) 423

Silver

A.W. Kleyn, D.A. Butler and A. Raukema, Dynamics of the interaction of O_2 with silver surfaces 363 (1996) 29
F. Buatier de Mongeot, M. Rocca and U. Valbusa, Energy and angle dependence of the initial sticking coefficient of O_2 on Ag(001) 363 (1996) 68
R.J.W.E. Lahaye, S. Stolte, S. Holloway and A.W. Kleyn, Out-of-plane scattering of Ar from Ag(111) 363 (1996) 91
K. Kawamoto, T. Mori, S. Kujime and K. Oura, Observation of the diffusion of Ag atoms through an a-Si layer on Si(111) by low-energy ion scattering 363 (1996) 156

Sulfur

T. Kishi and S. Itoh, Sulfur adsorption on an iron (001) surface by ab initio molecular dynamics 363 (1996) 100

Tungsten

T. Miyake, K. Kusakabe and S. Tsuneyuki, Inverse isotope effects in the surface diffusion of atoms 363 (1996) 403

Compounds (non-molecular solids)

Alkali halides

M. Szymonski, J. Kolodziej, P. Czuba, P. Korecki, P. Piatkowski, Z. Postawa, M. Piacentini and N. Zema, Photon stimulated desorption from alkali halide surfaces at near threshold energies 363 (1996) 229

CO/Cr_2O_3(0001)

I. Beauport, K. Al-Shamery and H.-J. Freund, Mechanism of the UV-laser-induced desorption of CO from Cr_2O_3(0001) 363 (1996) 252

Gallium arsenide

T. Yamauchi, Y. Sonoda, K. Sakamoto, S. Ushioda, H. Sano, J. Sakai and G. Mizutani, Surface SHG and photoemission from Cs/p-GaAs and the Cs/O_2/p-GaAs coadsorbed system 363 (1996) 385

Lanthanum hexaboride

R. Souda, W. Hayami, T. Aizawa, S. Otani and Y. Ishizawa, Auger-type electron emission from energetic He^+ ions interacting with the LaB_6(001) surface 363 (1996) 133

Zeolites

K. Domen, S.S. Kano, T. Fujino, M. Furuki, M. Kashitani, J. Kubota, J.N. Kondo, A. Wada, M. Ishida, F. Goto, F. Wakabayashi and C. Hirose, Vibrational relaxation of hydroxyl groups in zeolite: the effect of adsorbed Xe 363 (1996) 397

Molecules

Alkanes

Yu.A. Gruzdkov, K. Watanabe and Y. Matsumoto, Photochemistry of methane on deuterium-covered Pt(111) surfaces 363 (1996) 195
J. Yoshinobu, H. Ogasawara and M. Kawai, Broken symmetry of adsorbed methane and self-limiting photoinduced dissociation on Pt(111) 363 (1996) 234

Ammonia

E. Hasselbrink, M. Wolf, S. Holloway and P. Saalfrank, Classical and quantum-mechanical modeling of the stimulated desorption of ammonia from Cu(111) 363 (1996) 179
A.R. Burns, E.B. Stechel and D.R. Jennison, Aspects of electronically stimulated processes of chemisorbed molecules 363 (1996) 303

Carbon dioxide

H. Uetsuka, K. Watanabe and K. Kunimori, The dynamics of surface chemical reactions: infrared chemiluminescence of the product CO_2 desorbed from metal surfaces 363 (1996) 73

Carbon monoxide

H. Uetsuka, K. Watanabe and K. Kunimori, The dynamics of surface chemical reactions: infrared chemiluminescence of the product CO_2 desorbed from metal surfaces 363 (1996) 73
M. Kawai, J. Yoshinobu and N. Takagi, Temporal and local reduction of adsorption potential energy under gas phase: CO on Ni(100) and Pt(111) 363 (1996) 85
J. Yoshinobu and M. Kawai, Initial adsorption sites of CO on Pt(111) and Ni(100) at low temperature 363 (1996) 105
Y. Murata, K. Fukutani and H. Nakatsuji, Repulsive interaction of CO^+ and a Pt surface derived from very low energy ion scattering 363 (1996) 112
K. Fukutani, T.T. Magkoev, Y. Murata and K. Terakura, Adsorption and desorption of NO and CO on a Pt(111)–Ge surface alloy 363 (1996) 185
H. Aizawa and S. Tsuneyuki, First-principles investigation of photo-induced desorption of CO and NO from Pt(111) 363 (1996) 223

I. Beauport, K. Al-Shamery and H.-J. Freund, Mechanism of the UV-laser-induced desorption of CO from Cr_2O_3(0001) 363 (1996) 252

Deuterium

W.A. Diño, H. Kasai and A. Okiji, Combined effect of molecular rotational and surface vibrational excitations on the dissociative adsorption dynamics of D_2/Cu(111) 363 (1996) 52

Halogens

S. Yoneda, Y. Babasaki, M. Tanaka, F.H. Geuzebroek, F. Koga, N. Yamazaki and A. Namiki, The poisonous effect of alkali adatoms on Cl_2 sticking 363 (1996) 11
B. Kasemo, Charge transfer, electronic quantum processes, and dissociation dynamics in molecule–surface collisions 363 (1996) 22

Hydrogen

A. Gross, Dynamical quantum processes of molecular beams at surfaces: dissociative adsorption of hydrogen on metal surfaces 363 (1996) 1
W.A. Diño, H. Kasai and A. Okiji, Combined effect of molecular rotational and surface vibrational excitations on the dissociative adsorption dynamics of D_2/Cu(111) 363 (1996) 52
Y.-S. Park, J.-Y. Kim and J. Lee, Abstraction of CH_3 group from the CH_3I molecule adsorbed on Cu(100) by gas-phase hydrogen atoms 363 (1996) 62
T. Schlathölter, H. Franke, M. Vicanek and W. Heiland, The interaction of small molecules with Pd and K covered Pd surfaces at energies from 200 keV to 6 keV 363 (1996) 79
Ph. Avouris, R.E. Walkup, A.R. Rossi, H.C. Akpati, P. Nordlander, T.-C. Shen, G.C. Abeln and J.W. Lyding, Breaking individual chemical bonds via STM-induced excitations 363 (1996) 368
M. Okada, A.P. Baddorf, D.M. Zehner and E.W. Plummer, Effects of hydrogen on the dynamics of the $Mo_{0.95}Re_{0.05}$(110) surface 363 (1996) 416

Iodomethane

Y.-S. Park, J.-Y. Kim and J. Lee, Abstraction of CH_3 group from the CH_3I molecule adsorbed on Cu(100) by gas-phase hydrogen atoms 363 (1996) 62

Methane

J. Yoshinobu, H. Ogasawara and M. Kawai, Broken symmetry of adsorbed methane and self-limiting photoinduced dissociation on Pt(111) 363 (1996) 234

Nitrogen oxides

K. Fukutani, T.T. Magkoev, Y. Murata and K. Terakura, Adsorption and desorption of NO and CO on a Pt(111)–Ge surface alloy 363 (1996) 185
H. Aizawa and S. Tsuneyuki, First-principles investigation of photo-induced desorption of CO and NO from Pt(111) 363 (1996) 223
T.T. Magkoev, M.-B. Song, K. Fukutani and Y. Murata, Interaction of ultraviolet photons with NO/Ni(111) 363 (1996) 281
A.R. Burns, E.B. Stechel and D.R. Jennison, Aspects of electronically stimulated processes of chemisorbed molecules 363 (1996) 303

Oxygen

A.W. Kleyn, D.A. Butler and A. Raukema, Dynamics of the interaction of O_2 with silver surfaces 363 (1996) 29
F. Buatier de Mongeot, M. Rocca and U. Valbusa, Energy and angle dependence of the initial sticking coefficient of O_2 on Ag(001) 363 (1996) 68
H. Uetsuka, K. Watanabe and K. Kunimori, The dynamics of surface chemical reactions: infrared chemiluminescence of the product CO_2 desorbed from metal surfaces 363 (1996) 73
S. Nishigaki, K. Yamada, M. Naitoh and H. Iga, A metastable de-excitation spectroscopy study on the oxygenation of alkalated Ge(001) surfaces 363 (1996) 121
M. Kato, D.J. O'Connor, K. Yamamoto and R. Souda, Neutralization of a proton at adsorbate-covered metal surfaces 363 (1996) 150
J.A. Misewich, S. Nakabayashi, P. Weigand, M. Wolf and T.F. Heinz, Anomalous branching ratio in the femtosecond surface chemistry of O_2/Pd(111) 363 (1996) 204
T. Yamauchi, Y. Sonoda, K. Sakamoto, S. Ushioda, H. Sano, J. Sakai and G. Mizutani, Surface SHG and photoemission from Cs/p-GaAs and the Cs/O_2/p-GaAs coadsorbed system 363 (1996) 385

Phosphorous fluoride

H. Kaji, K. Kakitani, Y. Yagi and A. Yoshimori, Theoretical analysis of coverage-dependent rotational hindrance of PF_3 adsorbed on Ru(001) 363 (1996) 326

Water

M. Nagasono, K. Mase and T. Urisu, Auger electron–ion coincidence study for H_2O adsorbed on SiO_2/Si(111) at 80 K 363 (1996) 342

PHYSICAL STATE

Surfaces

Amorphous surfaces

M. Nagasono, K. Mase and T. Urisu, Auger electron–ion coincidence study for H_2O adsorbed on SiO_2/Si(111) at 80 K 363 (1996) 342

Dendritic and/or fractile surfaces

K. Domen, S.S. Kano, T. Fujino, M. Furuki, M. Kashitani, J. Kubota, J.N. Kondo, A. Wada, M. Ishida, F. Goto, F. Wakabayashi and C. Hirose, Vibrational relaxation of hydroxyl groups in zeolite: the effect of adsorbed Xe 363 (1996) 397

Polycrystalline surfaces

H. Uetsuka, K. Watanabe and K. Kunimori, The dynamics of surface chemical reactions: infrared chemiluminescence of the product CO_2 desorbed from metal surfaces 363 (1996) 73

Single crystal surfaces

H. Aizawa and S. Tsuneyuki, First-principles investigation of photo-induced desorption of CO and NO from Pt(111) 363 (1996) 223

G.K. Ivanov, M.A. Kozhushner and I.I. Oleinik, Tunneling dynamics of electrons and effective tunneling potential 363 (1996) 360

Low index single crystal surfaces

A. Gross, Dynamical quantum processes of molecular beams at surfaces: dissociative adsorption of hydrogen on metal surfaces 363 (1996) 1

S. Yoneda, Y. Babasaki, M. Tanaka, F.H. Geuzebroek, F. Koga, N. Yamazaki and A. Namiki, The poisonous effect of alkali adatoms on Cl_2 sticking 363 (1996) 11

B. Kasemo, Charge transfer, electronic quantum processes, and dissociation dynamics in molecule–surface collisions 363 (1996) 22

A.W. Kleyn, D.A. Butler and A. Raukema, Dynamics of the interaction of O_2 with silver surfaces 363 (1996) 29

K.J. Snowdon, R. Harder and A. Nesbitt, Dissociation dynamics of fast neutral molecules scattered under glancing incidence conditions from crystal surfaces 363 (1996) 42

W.A. Diño, H. Kasai and A. Okiji, Combined effect of molecular rotational and surface vibrational excitations on the dissociative adsorption dynamics of D_2/Cu(111) 363 (1996) 52

Y.-S. Park, J.-Y. Kim and J. Lee, Abstraction of CH_3 group from the CH_3I molecule adsorbed on Cu(100) by gas-phase hydrogen atoms 363 (1996) 62

F. Buatier de Mongeot, M. Rocca and U. Valbusa, Energy and angle dependence of the initial sticking coefficient of O_2 on Ag(001) 363 (1996) 68

H. Uetsuka, K. Watanabe and K. Kunimori, The dynamics of surface chemical reactions: infrared chemiluminescence of the product CO_2 desorbed from metal surfaces 363 (1996) 73

T. Schlathölter, H. Franke, M. Vicanek and W. Heiland, The interaction of small molecules with Pd and K covered Pd surfaces at energies from 200 keV to 6 keV 363 (1996) 79

M. Kawai, J. Yoshinobu and N. Takagi, Temporal and local reduction of adsorption potential energy under gas phase: CO on Ni(100) and Pt(111) 363 (1996) 85

R.J.W.E. Lahaye, S. Stolte, S. Holloway and A.W. Kleyn, Out-of-plane scattering of Ar from Ag(111) 363 (1996) 91

T. Kishi and S. Itoh, Sulfur adsorption on an iron (001) surface by ab initio molecular dynamics 363 (1996) 100

J. Yoshinobu and M. Kawai, Initial adsorption sites of CO on Pt(111) and Ni(100) at low temperature 363 (1996) 105

Y. Murata, K. Fukutani and H. Nakatsuji, Repulsive interaction of CO^+ and a Pt surface derived from very low energy ion scattering 363 (1996) 112

S. Nishigaki, K. Yamada, M. Naitoh and H. Iga, A metastable de-excitation spectroscopy study on the oxygenation of alkalated Ge(001) surfaces 363 (1996) 121

E. Hasselbrink, M. Wolf, S. Holloway and P. Saalfrank, Classical and quantum-mechanical modeling of the stimulated desorption of ammonia from Cu(111) 363 (1996) 179

K. Fukutani, T.T. Magkoev, Y. Murata and K. Terakura, Adsorption and desorption of NO and CO on a Pt(111)–Ge surface alloy 363 (1996) 185

Yu.A. Gruzdkov, K. Watanabe and Y. Matsumoto, Photochemistry of methane on deuterium-covered Pt(111) surfaces 363 (1996) 195

J.A. Misewich, S. Nakabayashi, P. Weigand, M. Wolf and T.F. Heinz, Anomalous branching ratio in the femtosecond surface chemistry of O_2/Pd(111) 363 (1996) 204

M. Szymonski, J. Kolodziej, P. Czuba, P. Korecki, P. Piatkowski, Z. Postawa, M. Piacentini and N. Zema, Photon stimulated desorption from alkali halide surfaces at near threshold energies 363 (1996) 229

J. Yoshinobu, H. Ogasawara and M. Kawai, Broken symmetry of adsorbed methane and self-limiting photoinduced dissociation on Pt(111) 363 (1996) 234

I. Beauport, K. Al-Shamery and H.-J. Freund, Mechanism of the UV-laser-induced desorption of CO from Cr_2O_3(0001) 363 (1996) 252

T.T. Magkoev, M.-B. Song, K. Fukutani and Y. Murata, Interaction of ultraviolet photons with NO/Ni(111) 363 (1996) 281

A.R. Burns, E.B. Stechel and D.R. Jennison, Aspects of electronically stimulated processes of chemisorbed molecules 363 (1996) 303

S. Ogawa and H. Petek, Two-photon photoemission spectroscopy at clean and oxidized Cu(110) and Cu(100) surfaces 363 (1996) 313

K. Nakatsuji, K. Matsuda, T. Yonezawa, H. Daimon and S. Suga, Adsorption and desorption processes of Cl on a Si(100) surface 363 (1996) 321

H. Kaji, K. Kakitani, Y. Yagi and A. Yoshimori, Theoretical analysis of coverage-dependent rotational hindrance of PF_3 adsorbed on Ru(001) 363 (1996) 326

Y. Yagi, K. Kakitani and A. Yoshimori, Excitation spectra of incommensurate Li chains on a Cu(100) surface 363 (1996) 331

K. Ueda, Electron-stimulated desorption study of an atomic hydrogen-adsorbed FZ-Si(100) surface 363 (1996) 337

Ph. Avouris, R.E. Walkup, A.R. Rossi, H.C. Akpati, P. Nordlander, T.-C. Shen, G.C. Abeln and J.W. Lyding, Breaking individual chemical bonds via STM-induced excitations 363 (1996) 368

M. Okada, A.P. Baddorf, D.M. Zehner and E.W. Plummer, Effects of hydrogen on the dynamics of the $Mo_{0.95}Re_{0.05}$(110) surface 363 (1996) 416

Surface defects

G.K. Ivanov, M.A. Kozhushner and I.I. Oleinik, Tunneling dynamics of electrons and effective tunneling potential 363 (1996) 360

Interfaces

Crystalline–amorphous interfaces

K. Kawamoto, T. Mori, S. Kujime and K. Oura, Observation of the diffusion of Ag atoms through an a-Si layer on Si(111) by low-energy ion scattering 363 (1996) 156

Solid–gas interfaces

B. Kasemo, Charge transfer, electronic quantum processes, and dissociation dynamics in molecule–surface collisions 363 (1996) 22

F. Buatier de Mongeot, M. Rocca and U. Valbusa, Energy and angle dependence of the initial sticking coefficient of O_2 on Ag(001) 363 (1996) 68

M. Kawai, J. Yoshinobu and N. Takagi, Temporal and local reduction of adsorption potential energy under gas phase: CO on Ni(100) and Pt(111) 363 (1996) 85

Adatoms

T. Kishi and S. Itoh, Sulfur adsorption on an iron (001) surface by ab initio molecular dynamics 363 (1996) 100

M. Kato, D.J. O'Connor, K. Yamamoto and R. Souda, Neutralization of a proton at adsorbate-covered metal surfaces 363 (1996) 150

H. Aizawa and S. Tsuneyuki, First-principles investigation of photo-induced desorption of CO and NO from Pt(111) 363 (1996) 223

G.K. Ivanov, M.A. Kozhushner and I.I. Oleinik, Tunneling dynamics of electrons and effective tunneling potential 363 (1996) 360

Clusters

K. Ito, S. Ohyama, Y. Uehara and S. Ushioda, STM light emission spectra of individual nanostructures of porous Si 363 (1996) 423

Porous solids

K. Domen, S.S. Kano, T. Fujino, M. Furuki, M. Kashitani, J. Kubota, J.N. Kondo, A. Wada, M. Ishida, F. Goto, F. Wakabayashi and C. Hirose, Vibrational relaxation of hydroxyl groups in zeolite: the effect of adsorbed Xe 363 (1996) 397

K. Ito, S. Ohyama, Y. Uehara and S. Ushioda, STM light emission spectra of individual nanostructures of porous Si 363 (1996) 423

ELECTRICAL AND MAGNETIC BEHAVIOR

Surfaces and/or films

Insulating films

I. Beauport, K. Al-Shamery and H.-J. Freund, Mechanism of the UV-laser-induced desorption of CO from Cr_2O_3(0001) 363 (1996) 252

Insulating surfaces

M. Szymonski, J. Kolodziej, P. Czuba, P. Korecki, P. Piatkowski, Z. Postawa, M. Piacentini and N. Zema, Photon stimulated desorption from alkali halide surfaces at near threshold energies 363 (1996) 229

Magnetic surfaces

T. Kishi and S. Itoh, Sulfur adsorption on an iron (001) surface by ab initio molecular dynamics 363 (1996) 100

Metallic films

R. Souda, K. Yamamoto, W. Hayami, T. Aizawa and Y. Ishizawa, Low-energy He and Ne scattering from Al(111): reionization versus autoionization 363 (1996) 139

T. Yamauchi, Y. Sonoda, K. Sakamoto, S. Ushioda, H. Sano, J. Sakai and G. Mizutani, Surface SHG and photoemission from Cs/p-GaAs and the Cs/O_2/p-GaAs coadsorbed system 363 (1996) 385

Metallic surfaces

A. Gross, Dynamical quantum processes of molecular beams at surfaces: dissociative adsorption of hydrogen on metal surfaces 363 (1996) 1

W.A. Diño, H. Kasai and A. Okiji, Combined effect of molecular rotational and surface vibrational excitations on the dissociative adsorption dynamics of D_2/Cu(111) 363 (1996) 52

F. Buatier de Mongeot, M. Rocca and U. Valbusa, Energy and angle dependence of the initial sticking coefficient of O_2 on Ag(001) 363 (1996) 68

H. Kawai, A. Yoshimori and M. Nakayama, Valence fluctuation state of a metastable He atom beam on a metal surface, and singlet–triplet conversion 363 (1996) 127

T. Mii and K. Makoshi, An interpolation formula for electron transfer in atom–surface collision and its validity 363 (1996) 145

K. Fukutani, T.T. Magkoev, Y. Murata and K. Terakura, Adsorption and desorption of NO and CO on a Pt(111)–Ge surface alloy 363 (1996) 185

J.A. Misewich, S. Nakabayashi, P. Weigand, M. Wolf and T.F. Heinz, Anomalous branching ratio in the femtosecond surface chemistry of O_2/Pd(111) 363 (1996) 204

H. Aizawa and S. Tsuneyuki, First-principles investigation of photo-induced desorption of CO and NO from Pt(111) 363 (1996) 223

S. Ogawa and H. Petek, Two-photon photoemission spectroscopy at clean and oxidized Cu(110) and Cu(100) surfaces 363 (1996) 313

H. Kaji, K. Kakitani, Y. Yagi and A. Yoshimori, Theoretical analysis of coverage-dependent rotational hindrance of PF_3 adsorbed on Ru(001) 363 (1996) 326

Semiconducting films

K. Nakatsuji, K. Matsuda, T. Yonezawa, H. Daimon and S. Suga, Adsorption and desorption processes of Cl on a Si(100) surface 363 (1996) 321

Interfaces

H. Kasai, T. Kakuda and A. Okiji, Conductance quantization in an atom-sized contact between an STM-tip and a metal surface 363 (1996) 428

Contacts

H. Kasai, T. Kakuda and A. Okiji, Conductance quantization in an atom-sized contact between an STM-tip and a metal surface 363 (1996) 428